

## ABSTRACT OF THE DISCLOSURE

A method of managing a fluid or gas reservoir is disclosed which assimilates diverse  
5 data having different acquisition time scales and spatial scales of coverage for iteratively  
producing a reservoir development plan that is used for optimizing an overall  
performance of a reservoir. The method includes: (a) generating an initial reservoir  
characterization, (b) from the initial reservoir characterization, generating an initial  
reservoir development plan, (c) when the reservoir development plan is generated,  
10 incrementally advancing and generating a capital spending program, (d) when the capital  
spending program is generated, monitoring a performance of the reservoir by acquiring  
high rate monitor data from a first set of data measurements taken in the reservoir and  
using the high rate monitor data to perform well-regional and field-reservoir evaluations,  
(e) further monitoring the performance of the reservoir by acquiring low rate monitor  
15 data from a second set of data measurements taken in the reservoir, (f) assimilating  
together the high rate monitor data and the low rate monitor data, (g) from the high rate  
monitor data and the low rate monitor data, determining when it is necessary to update  
the initial reservoir development plan to produce a newly updated reservoir development  
plan, (h) when necessary, updating the initial reservoir development plan to produce the  
20 newly updated reservoir development plan, and (i) when the newly updated reservoir  
development plan is produced, repeating steps (c) through (h). A detailed disclosure is  
provided herein relating to the step (a) for generating the initial reservoir characterization  
and the step (b) for generating the initial reservoir development plan.